

Title (en)

METHOD AND DEVICE FOR POWER SYSTEM PROTECTION

Title (de)

VERFAHREN UND EINRICHTUNG ZUM SCHUTZ EINES STROMVERSORGUNGSSYSTEMS

Title (fr)

PROCEDE ET DISPOSITIF DE PROTECTION D'UN SYSTEME GENERATEUR

Publication

**EP 1295374 B1 20091111 (EN)**

Application

**EP 01922196 A 20010412**

Priority

- SE 0100826 W 20010412
- SE 0001436 A 20000414
- US 54957400 A 20000414

Abstract (en)

[origin: WO0180393A1] The present invention relates to a method for protecting a zone in a power system, which zone comprises a number of transmission lines connected to power sources and a number of transmission lines connected to a number of loads where the power sources and the loads are arranged outside the zone, wherein the method comprises the steps of: continuously measuring all the incoming currents ( $I_{in}$ ) to the zone, continuously measuring all the outgoing currents ( $I_{out}$ ) from the zone, and continuously calculating the differential current ( $I_d$ ) according to  $I_d = I_{in} - I_{out}$ . The method is characterised in continuously integrating  $I_{in}$ ,  $I_{out}$  and  $I_d$  according to Formula (I), where T is the fundamental frequency cycle, whereby changes of the continuously integrated values  $I_{<IN?}, I_{>OUT?}$  and  $I_{>D?}$  constitute indications of whether faults on the power system occur within or outside the zone. The present invention also relates to a device and computer program product for performing the method.

IPC 8 full level

**H02H 3/28** (2006.01); **H02H 3/44** (2006.01)

CPC (source: EP)

**H02H 3/283** (2013.01); **H02H 3/44** (2013.01)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 0180393 A1 20011025**; AT E448591 T1 20091115; AU 4897001 A 20011030; CA 2406313 A1 20011025; CA 2406313 C 20110802; DE 60140446 D1 20091224; EP 1295374 A1 20030326; EP 1295374 B1 20091111; ES 2334205 T3 20100308

DOCDB simple family (application)

**SE 0100826 W 20010412**; AT 01922196 T 20010412; AU 4897001 A 20010412; CA 2406313 A 20010412; DE 60140446 T 20010412; EP 01922196 A 20010412; ES 01922196 T 20010412